

The transition from unencrypted (?ClearQAM?) digital cable to all-encrypted digital cable negatively affected compatibility between cable and consumer electronics and instead caused an unfortunately sustainable, measurable, and unnecessary harm to consumers. The move cannot be considered pro-consumer for the following reasons:

1.) Piracy-control and access-control can be sufficiently achieved without digital encryption.

Seemingly antiquated and simple access control technologies such as in-line filters, when maintained well, have been historically effective in controlling consumer access to content in cable systems ? and this technology is still compatible and effective in newer analog-free all-digital systems.

2.) Although a significant number of consumer TVs and peripheral devices contain digital cable tuners, none manufactured before 2004 are capable of tuning in to an encrypted channel. Moreover, only a small fraction of devices manufactured in the 6 years following 2004 support decryption of digital cable channels. Therefore, enabling encryption strongly limits the number of people that can view the content, even if they pay for it.

3.) A significant number of devices which support high-definition content and digital cable do not have high-definition auxiliary inputs (which would facilitate the use of a digital cable box for decryption of encrypted content.) Examples include Media Center PCs, HD PVRs, DVRs, TiVo boxes, VCRs, and some HDTV monitors. These consumers would be forced to accept a lower quality of picture and sound (through standard definition auxiliary inputs from a cable box).

4.) The decision to encrypt the digital cable network has an ongoing, profound, and quantifiable negative environmental impact on the consumers of cable services, as well as Americans at-large. I have estimated that Comcast?s Digital Transport Adapters (the miniature cable boxes supplied to consumers after basic cable encryption was enabled) consume over seven and a half million kilowatts of power every day in the United States, even when the devices are ?off.? To give a comparison, this figure is close to the daily output of an average municipal sized coal-fired power plant. Because of enabling encryption, a specifically quantifiable amount of additional pollution is produced every day in the United States. Encryption technology in the digital cable system quantifiably contributes to Global Climate Change, instead of helping to fight it. As such, encryption may be counterproductive to society and anti-consumer in general. Since access control can be maintained in alternative less environmentally damaging ways, encryption should not be considered at this time to be an option for cable systems in the United States.

5.) The specific decision to encrypt results in no additional gains for consumers in terms of picture and sound quality, nor the number of channels they can view. In fact, a significant number of consumers actually experience a significant drop in both the quality of their picture and sound, and the number of channels they can receive using their own equipment (without a corresponding drop in price). As an example, Comcast's DTA boxes only allow access to the first hundred or so channels and none in HD, whereas the same customer equipment before the addition of encryption may have been able to tune directly into digital cable channels, including HD content which is not available through the DTA cable boxes. Since the quality of picture and sound goes down with encryption enabled, and fewer channels become viewable (even if they are being paid for), encryption should not be considered pro-

consumer.

6.) The overall cost of the system increases and is shifted to consumers (through electric bill increase due to increased power consumption from new previously unnecessary decryption cable boxes, etc.). Clearly, it is not in the best interest of the consumer to raise prices unnecessarily, and to shift costs in such a way.

In summary, the transition from unencrypted (?ClearQAM?) digital cable to all-encrypted digital cable negatively affected compatibility between cable and consumer electronics and instead caused an unfortunately sustainable, measurable, and unnecessary harm to consumers. Hence, encryption of digital cable channels cannot be considered pro-consumer.

Thank you for taking the time to read this comment. The migration from unencrypted to encrypted digital cable (which has nothing to do with analog to digital migration, except that it happened at the same time) was unnecessary. Comcast may have some unpublished, private data, which disagrees with me on this standpoint. If this were the case however, and encryption were necessary, then I still argue that the way in which Comcast migrated from unencrypted to encrypted basic cable was not pro-consumer: Comcast could have deferred encryption until Cable Card-compatible equipment was actually available for purchase. (Currently, Cable Card Tuners for Media Center PCs, HDTVs, TiVo boxes, and so on are not available through retail distribution channels.) Comcast's decision to encrypt basic cable right now simply caused an unfortunately sustainable, measurable, and unnecessary harm to consumers.